CV6

RISK FACTORS AND OUTCOMES OF SURGICAL SITE INFECTIONS IN DIABETICS UNDERGOING CARDIAC SURGERY

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OBJECTIVE: Previous studies on risk factors for postoperative surgical site infections (SSI) have identified presence of diabetes as a major risk factor for development of SSI following cardiac surgery. However, why certain diabetics are more likely to develop SSI than others is unknown. The purpose of this study was to identify risk factors and outcomes of SSI in diabetics undergoing cardiac surgery. **METHOD:** Nested, case-control study. Patients with diabetes undergoing coronary artery bypass or valve replacement surgery at St. Luke's Episcopal Hospital, Houston, Texas, who experienced a post-operative SSI (n = 71) in 2002–2004 were compared to randomly selected, uninfected controls (n = 103) whom underwent similar surgery during the same time period. Clinical data was collected to determine risk factors and outcomes using univariate statistics and multivariate logistic regression. **RESULTS:** History of cardiac disorders (congestive heart failure, stroke, angina, or myocardial infarction) (OR = 1.589; 95% CI = 1.132–2.230; p = 0.0075) and obesity (OR = 2.849; 95% CI = 1.241–6.542; p = 0.0136) were identified as significant independent risk factors for SSI in diabetics undergoing cardiac surgery. Cases were hospitalized an average eight-days longer than uninfected controls (p = 0.0006) and experienced twice as many complications requiring reoperation (10.6% vs. 21%; p = 0.057). **CONCLUSION:** Cardiac history and obesity were identified as significant risk factors for SSI in our diabetic patient population. SSI significantly increased hospital length of stay in our diabetic population.

CV7

9301 COST-EFFECTIVENESS OF LONG-TERM THERAPY WITH CLOPIDOGREL FOLLOWING PERCUTANEOUS CORONARY INTERVENTION: A SWEDISH ANALYSIS OF THE CREDO-TRIAL

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OBJECTIVES: The CREDO trial demonstrated the clinical efficacy of 12-month therapy with clopidogrel, with a 27% RRR (p = 0.02) combined risk of death, MI, or urgent target revascularization in patients undergoing percutaneous coronary intervention (PCI) and being treated with ASA. The purpose of this study was to evaluate the long-term cost-effectiveness of 12-month versus 28-day therapy with clopidogrel in Sweden. **METHODS:** A Markov model was developed, enabling modelling over the longer term. A hypothetical cohort of patients in a post-PCI state was assumed to have certain risks of suffering one of the endpoints of the CREDO trial: stroke, MI or death. First-year risks were taken from the observed rates of the CREDO trial while risks for following years were estimated based on epidemiological data, provided by the Centre for Epidemiology at the Swedish National Board of Health and Welfare. Cost data was collected from published sources. The perspective was that of society. Effectiveness was measured as the number of life-years gained from long-term treatment with clopidogrel. Cost-effectiveness acceptability curves were created using bootstrapping to estimate parameter uncertainty and Monte Carlo simulation to estimate the effect of this uncertainty in the model. **RESULTS:** The model predicted a mean survival of 12.35 years in the 12-month arm compared to 12.28 in the 28-day arm, an incremental gain of 0.065 life-years. The increase in survival came at a predicted incremental cost of 171€, resulting in an incremental cost-effectiveness ratio (ICER) of 2637€. If only direct costs were considered, the ICER was 7588€. If costs due to increased survival were included, the ICER was 14,681€. Results were insensitive to variations in costs and discount rates. **CONCLUSIONS:** The predicted cost-effectiveness ratio of long-term treatment with clopidogrel in patients undergoing PCI is well below the threshold values currently considered cost-effective.

CV8

ASSOCIATION BETWEEN LONG-TERM USE OF NSAIDS/COX-2 INHIBITORS AND CARDIOVASCULAR RISK–A RETROSPECTIVE ANALYSIS USING THE VETERAN AFFAIRS (VA) DATABASE

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The search for less gastrointestinal toxic nonsteroidal anti-inflammatory drugs (NSAIDs) led to the introduction of the selective cyclooxygenase-2 (COX-2) inhibitors. However, with this introduction into the market, there have been concerns regarding their safety, particularly cardiovascular safety. **OBJECTIVE:** The purpose of this study was to assess the cardiovascular risk (events included: myocardial infarction, stroke, and myocardial infarction-related deaths) associated with long-term use (after 180 days of exposure) of nonselective NSAIDs and COX-2 inhibitors. **METHODS:** A retrospective analysis of the Veterans Integrated Service Network 17 Veteran's Affairs (VA) database was conducted. Medicare data and Department of Health mortality data were incorporated to capture events occurring outside the VA health care network. Patients 35 years of age and older receiving celecoxib, rofecoxib, ibuprofen, etodolac, and naproxen from January 1, 1999 through December 31, 2001, were included. Multivariate Cox proportional hazard models were used to analyze the relationship between cardiovascular risk and NSAID/COX-2 inhibitor use while adjusting for various demographic and co-morbidity factors. **RESULTS:** We identified 6814 long-term exposure periods and 42 cardiovascular events over the study period. Compared to long-term ibuprofen use, long-term use of celecoxib was associated with a 3.64 fold (95% CI 1.36–9.70; p = 0.01) increase in cardiovascular risk. Long-term use of rofecoxib was associated with a 6.64 fold (95% CI 2.17–20.28; p = < 0.01) increased risk when compared to long-term users of ibuprofen. Long-term exposure to naproxen and etodolac was not associated with a cardionegative or cardioprotective effect when compared to long-term ibuprofen users. **CONCLUSIONS:** The findings of this observational study along with recent clinical trial results suggest that long-term exposure to COX-2 inhibitors is associated with an increased cardiovascular risk. In addition, the study results do not show that naproxen or etodolac provide a cardioprotective or cardionegative effect.

Cost Studies II

CS5

COST OF URINARY INCONTINENCE IN GERMANY: RESULTS FROM PROSPECTIVE URINARY RESEARCH (PURE)

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OBJECTIVE: Estimate direct medical costs of Urinary Incontinence (UI), namely Stress Urinary Incontinence (SUI), Mixed